WHEEL GLIDING CONTROL STRUCTURE

BACKGROUNG OF THE INVENTION

a) Field of the Invention

The invention herein relates to a type of structure meant to control the gliding of a wheel, more specifically to a kind of wheel's gliding control structure which flexibly pivot while also able to achieve sliding to the left and right.

b) Description of the Prior Art

The structure commonly used on the wheels of children's scooter, roller skate, roller blade, etc, is usually a bearing positioned in the central hole of the wheel. Once the bearing in the center has been fixed to the shell of the car or to the shoe, the above-mentioned sport equipments are able to slide on the wheels. Because these common wheels are of a fixed kind, therefore when moving, the user has to rely on one's own posture and movements in order to control the direction of the turn, which makes the control more difficult. Comparatively, it requires rather mastered control skills thus often leading users to lose patience and show decreased interest in the sport. This is definitely not ideal.

SUMMARY OF THE INVENTION

The primary objective of the invention is to provide a kind of gliding control structure for wheels, making the control of the direction of a wheel easier and effortless, thus enabling a more flexible maneuverability.

The above-mentioned control structure consists in two symmetrical shells and each internal side of both shells is a U-shaped hollow, with a groove running lengthways in its center; and a fixed axle in shape of a square rod, on surfaces of which are symmetrical oval cogs. Once the two hollows of the shells have enclosed the fixed axle, then it can be stuck into a central empty space of the wheel. When the wheel is moving, the cogs of the fixed axle gliding along the grooves of the shell thereby enabling left and right movements of the wheel thus increasing its flexibility.

To enable a further understanding of the said objectives and the technological methods of the invention herein, the brief description of the drawings below is followed by the detailed description of the preferred embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective exploded drawing of the invention herein.

Figure 2 is a perspective drawing of the invention herein.

Figure 3 is a cross-sectional drawing of the invention herein.

Figure 4 is a cross-sectional schematic drawing of the invention herein.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to Figure 1, Figure 2 and Figure 3 the invention mainly consists of a shell 1 forming symmetrical two parts, and a fixed axle 2, wherein, an internal side of both parts of the shell 1 is a U-shaped hollow 11, with a groove 12 running lengthways in the center thereof; in the middle of a surface of the shell 1 there is a protruding circle;

The fixed axle 2 is put between the two parts of the shell 1, a hole 21 is formed in the center therein, a surfaces of the fixed axle 2 present symmetrical oval cogs 22, both extremities support a bigger slab 23;

By means of the above-mentioned combination of elements, this fixed axle 2 is enveloped within the two parts of the shell 1. Furthermore, the cogs 22 fit in the grooves 12, thus enabling the shell 1 to be stuck and secured in a central hole 31 of a wheel 3. When this operation is completed, then the hole 21 of the fixed axle 2 is used for fastening to roller-skate, children scooter or other sport equipments. When the wheel 3 is in action, the cogs 22 of the fixed axle 2, running along the groove

12, thereby allowing left or right turns and increasing the maneuverability of the wheel.

Referring to Figure 4, when the invention herein is used under normal conditions, the cogs 22 of the fixed axle 2 are kept inside the grooves 12 of the shell 1. Then, the user with light movements of control makes the grooves 12 run along the cogs 22, thus moving left or right. Comparably, the fixed axle 2, in the fixed state, makes the wheel 3 to slide left or right allowing the control of left/right turns.

It is of course to be understood that the embodiments described herein are merely illustrative of the principles of the invention and that a wide variety of modifications thereto may be effected by persons skilled in the art without departing from the spirit and scope of the invention as set forth in the following claims.